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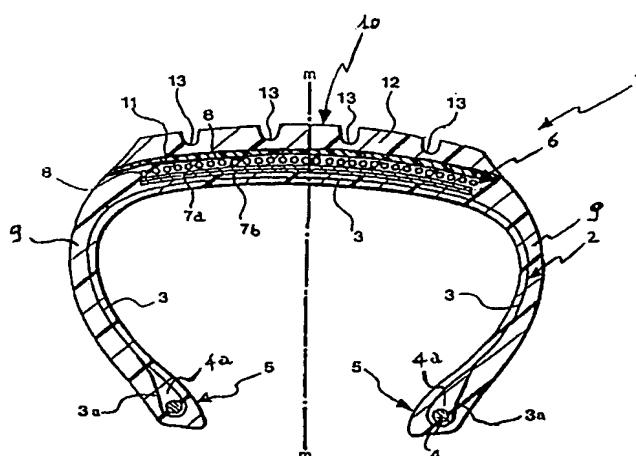
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(54) Title: TYRE FOR VEHICLE WHEELS WITH TREAD BAND OF CAP AND BASE CONSTRUCTION



(57) Abstract: Tyre for vehicle wheels, comprising a carcass structure (2) with at least one carcass ply (3) shaped in a substantially toroidal configuration, the opposite lateral edges (3a) of which are associated with respective right-hand and left-hand bead wires (4), each bead wire being enclosed in a respective bead (5); a belt structure (6) comprising at least one belt strip (7a, 7b) applied in a circumferentially external position relative to said carcass structure (2); a tread band (10) superimposed circumferentially on said belt structure (6) comprising a radially outer layer (12) designed to come into contact with the ground and a radially inner layer (13) interposed between said radially outer layer and said belt structure (6); a pair of sidewalls (9) applied laterally on opposite sides relative to said carcass structure (2); in which said radially inner layer (11) includes a crosslinked elastomeric composition comprising: (a) at least one diene elastomeric polymer; (b) at least one layered inorganic material having an individual layer thickness of from 0.01 nm to 30 nm, preferably from 0.05 nm to 15 nm.

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